

## AMENDMENTS TO THE CLAIMS

Claims 1-3 (Cancelled).

4. (Currently amended) A look-ahead stack management system for configuring a look-ahead state of an operand stack in a computer system capable of out -of-order execution, comprising:

a data file having ~~entries~~ registers each being able to hold data; and  
an advanced mapping file having ~~entries~~ registers each being able to hold  
~~an entry address~~ a register number in said data file, wherein:

each time a modification is to be made on said operand stack, said advanced mapping file is so managed that, for each ~~entry~~ register of said advanced mapping file that is to hold ~~an entry address~~ a register number in said data file allocated to an operand stack element, the ~~address of the entry number~~ of the register of said advanced mapping file is to indicate the number of operand stack elements over said operand stack element.

5. (Currently amended) A look-ahead stack management system for configuring a look-ahead state of an operand stack in a computer system capable of out -of-order execution, comprising:

a data file having ~~entries~~ registers each being able to hold data; and  
an advanced mapping file having ~~entries~~ registers each being able to hold  
~~an entry address~~ a register number in said data file, wherein:

each time a modification is to be made on said operand stack, said advanced mapping file is so managed that, for each ~~entry~~ register of said advanced mapping file holding ~~an entry address~~ a register number in said data file allocated to an operand stack element, if the ~~entry~~ register of said advanced mapping file is to hold ~~an entry address~~ a register number in said data file allocated to an operand stack element, the number of operand stack elements over the operand stack element whose value is held / to be held in the ~~entry~~

register of said data file indicated by the ~~address~~ number held in the ~~entry~~  
register of said advanced mapping file is to be unchanged.